

WHAT IS *ANODONTA (EUPHRATA) BAHLIKIANA* PALLARY?

BY DR. F. HAAS

In 1933 Pallary (Bull. Mus. Hist. Nat. Paris (2), 5, p. 150) proposed a new section of *Anodonta*, *Euphrata*, for an assumedly new species from Nahr Bâhlik, a left tributary of the Euphrates in Syria. When in 1940 I published my tentative classification of Palearctic Unionids (Zool. Ser. Field Mus., 24, p. 115-141; 1940), no more detailed description of this new *Anodonta* from Syria had come to my knowledge and so, familiar with Pallary's tendency toward splitting up old and known species, I tentatively added his "species" of *Anodonta* to the synonymy of *Anodonta cygnea* Linne. Very shortly after the above-mentioned classification had been published, Pallary's "Deuxième Addition à la Faune Malacologique de la Syrie" (Mém. Inst. Egypt., 39, p. 1-141, pls. 1-7, 1939) was received and an adequate description and figure of *Anodonta (Euphrata) bahlikiana* was found in it; and this additional information made it obvious that the species in question can by no means be separated from *Anodonta vescoiana* Bourguignat, 1857. If I had been mistaken in combining *bahlikiana* with *cygnea*, I had been right in so far as *bahlikiana* was no new species, and owed its creation only to too fine a discrimination.

The exact systematical position of *Anodonta (Euphrata) bahlikiana* now being suggested, a word or two may be said about the section *Euphrata* created for *Anodonta bahlikiana*. As I have tried to point out in 1940, *Anodonta vescoiana*, now including *A. bahlikiana*, does not belong to the Palearctic group of *A. cygnea*, but to the same group as *A. woodiana* Lea, widely spread in East Asia and even represented in the North American fauna by the species grouping themselves around *A. grandis* Say. To my judgment, this group belongs to typical *Anodonta*, and cannot be separated into a special subgenus or section. This has been tried by P. Fischer, who (Man. Conch., 1886, p. 1003) proposed the subgeneric name of *Pteranodon* for *Anodonta magnifica* Lea, now considered a synonym of *Anodonta woodiana* Lea. Logically, *Euphrata* Pallary thus becomes a synonym of *Pteranodon* Fischer.

Quite recently, Shadin (Faune de l'URSS., Mollusques, 4, No. 1, Unionidae, p. 117, 140; 1938) has tried to reinforce the separation of the *woodiana* group as a distinct subgenus, *Pteranodon*, from *Anodonta* proper; but the distinctive features offered, *i.e.*, shape of the shell and of the glochidium, do not seem convincing to me.

NOTES ON *ANGUISPIRA* AND *DISCUS*

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This paper is a supplement to "A Monographic Study of the Snails of the Genera *Anguispira* and *Discus* of North America, exclusive of Mexico," which appeared under my authorship in the Annals of the Carnegie Museum, vol. 27, 1940, pp. 371-426.

Discus patulus carinatus, which new varietal name I gave to *Discus patulus angulatus*, stands as a good subspecies, as *Helix (Patula) perspectiva carinata* Gratacap (Bull. Am. Mus. Nat. Hist., vol. 14, 1931, p. 358) is a synonym of *Discus bryanti nigromontanus* (Pils.). I had the opportunity this past spring of examining Gratacap's *carinata* at the American Museum of Natural History. This variety had previously been placed under *Discus patulus angulatus* Kutelka as a questionable synonym.

The distributional range of *Discus patulus carinatus* can be extended westward to Grand Rapids, Michigan, and Whitehall, Greene County, Illinois. This subspecies has also been recorded from Brighton and Oberlin, Ohio, and New Harmony, Indiana.

In the Monographic Study of *Anguispira* and *Discus* I included three charts showing the interrelationship of the various species. One of these charts showed *Discus rotundatus* (Mueller), *D. meclintocki* (F. C. Baker), and *D. m. angulatus* (F.C.B.) descending from *D. patulus*. Since B. Shimek found a living specimen of *D. meclintocki* in Iowa in 1928 there is the possibility that this species is not ancestral to *D. patulus*, which opinion J. P. E. Morrison holds. From this it is more plausible that *D. meclintocki* and *D. m. angulatus* are the ancestral or parental species of *patulus*, or all, together with *D. rotundatus*, are offshoots of the same common ancestor that existed in the past geological ages. Further study of *Discus sandersoni* (Russell), *D. similimus*